

Typically, a user might create several automated reporters. Because users will want a quick way to determine what's new without having to access each independent reporter, we designed the newspaper component to allow users to skim through all new information. Each reporter is allocated a 'column' in the newspaper. If new information has been retrieved by the reporter since the last edition of the newspaper, the associated column appears in the current newspaper, and contains the titles and brief excerpts of each item found. Reporters that find large amounts of relevant information appear on the front page; progressively less active reporters appear on subsequent pages. A listing of the columns published in the current issue is always available to the user and serves as a navigation device. From the newspaper, the user can either access the full text of an item of interest or call up the reporter. Consequently, if a reporter's column starts to stray from the desired information, the user can easily revise the reporter's assignment.

Whether users are interacting with a reporter or a newspaper, if they encounter an article they wish to keep, they may save it into a notebook. Notebooks allow users to create their own customized databases. Figure 3 describes features of a preliminary design which support practices such as browsing, annotation, and organization.

SUMMARY

In this paper we've described the investigation phase of a project aimed at creating a desktop information system for general users. We began by describing problems due to inappropriate expectations of intelligence that arise when users employ natural language and relevance feedback to retrieve information. Similar problems may arise in other domains as interfaces grow more intelligent and adaptable. In our prototype, we use a "reporter." This anthropomorphic metaphor might be more suited to the fuzziness and inevitable 'mistakes' that occur in information retrieval.

Our investigation also included observations and interviews of professional searchers, general users of on-line systems, and accountants, which revealed a number of needs and practices that a desktop information system should support. The system should address the need for metaknowledge and offer support for dealing with dynamic information. The current interface prototype addresses these issues only slightly, because the initial implementation will provide its users with access to familiar information sources. In addition, the system should support current practices such as skimming, annotation, and organization. The newspaper and notebook components of the interface prototype illustrate some ways of providing this support.

The next phase of this project includes the implementation of the interface, its installation in an accounting office, and the observation of its use. At a later date, we hope to report on the nature and efficacy of the implemented interface and use our findings to drive the next design phase.

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